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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/289,601	04/12/1999	SHINJI KONISHI	Q53957	8834

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SUGHRUE MION ZINN MACPEAK & SEAS PLLC
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER

TRAN, DOUGLAS Q

ART UNIT PAPER NUMBER

2624

DATE MAILED: 08/13/2002

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/289,601

Applicant(s)

KONISHI, SHINJI

Examiner

Douglas Q. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Prosecution Application

1. The request filed on 7/16/02 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/289,601 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-19, 24, 28-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fujita et al. (US Patent No. 6,055,361) and Fujiyama et al. (US Patent No. 6,336,141 B1).

As to claim 11, Fujita teaches:

Reception means (41 in fig. 1) for receiving print job data containing reply information (commands in the print job data includes urgent command 'col. 5, lines 56-58', the urgent command includes status inquiry command 'col. 6, lines 16-18' and more reference in col. 13, lines 59-67, col. 14, lines 47-55) and print data (image data, col. 5, lines 7-9)

print job data processing means (i.e., command processor 23 in fig. 1) for interpreting the print job data (col. 5, lines 10-14), detecting the reply information from the print job data and

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returning a process state of the print job based on the reply information to a predetermined destination which is external to the printer (col. 6, lines 24-29 and col. 2, lines 55-67);

print control means (24 in fig. 1) for printing based on interpretation of the print data processing means (col. 5, lines 16-18); and

However, Fujita does not teach the information of the predetermined destination is included in intrinsic data of the reply information.

Fujiyama, in the same field of endeavor, teaches the information of the sending device or user is included in the request information (search condition 103 in fig. 10) in the packet (101 in fig. 10, col. 11, lines 1-6) and also reply information includes the determined destination (see 115 in fig. 11A and 11B, col. 11, lines 20-29).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the status inquiry command of Fujita including the information of the sending device or user as taught by Fujiyama. The suggestion for modifying the status inquiry command of Fujita can be reasoned by one of ordinary skill in the art as set forth by Fujiyama because 1) both of Fujita and Fujiyama are the same area of exchanging the communication data between a plurality of devices; 2) Fujiyama provides exchanging communication between a plurality of input devices and output devices in which information of each of input devices and output devices are clarified in each of request packets and reply information packets. Therefore, the resultant of the combination would allow the user at each computer in the system of Fujita or Fujiyama to keep track the status of the sending job.

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As to claim 12, Fujita teaches the print job data processing means returns the reply information to the predetermined destination after completion of processing of the print data (col. 5, line 64 through col. 6, line 5).

As to claim 13, Fujita teaches if the reply information is related to print data concerning print operation, the print job data processing means checks execution of the print data concerning print operation before returning the reply information to the predetermined destination (col. 5, line 64 through col. 6, line 5).

As to claim 14, Fujita teaches the print data concerning print operation is at least any one of a paper feed instruction, a paper eject instruction, a page feed instruction, a line feed instruction and a carriage return instruction (col. 5, lines 24-40).

As to claim 15, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein the print job data processing means returns timing specified on the timing specification information (col. 1, lines 48-50).

As to claim 16, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print data processing means returns the reply information to the predetermined destination after completion of processing the print data related to the reply information (col. 1, lines 48-50).

As to claims 17-18, Fujita teaches the command code including request for status information (in fig. 8, the order of command codes does not effect the result for requesting to the printer).

As to claims 19 and 31, Fujita teaches the reception means, the print data processing means, and the print control means can operate in parallel (see fig. 1).

As to claim 24, the combination of Fujita and McCormick teaches instruction for instructing the apparatus claim 11 as indicated above.

As to claims 28-29, Fujiyama teaches the printer system in utilized in a network environment includes a plurality of host computers that output information to the printer. (see fig. 1).

4. Claims 1-10, 20-23, 25-27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fujita et al. (US Patent No. 6,055,361) and Fujiyama et al. (US Patent No. 6,336,141 B1), McCormick et al. (US Patent No. 5,706,411).

As to claim 1, Fujita teaches:

a host computer (10 in fig. 1) and a printer (20 in fig. 1) for receiving print data from the host computer and printing based on the print data;

print job data processing means (i.e., command processor 23 in fig. 1) for interpreting the print job data comprises the print data (i.e. image data) and reply information (i.e., commands col. 5, lines 5-18) (note: commands in the print job data includes urgent command 'col. 5, lines 56-58', the urgent command includes status inquiry command 'col. 6, lines 16-18' and more reference in col. 13, lines 59-67, col. 14, lines 47-55), detecting and returning the reply information to a predetermined destination which is external to the printer (col. 2, lines 55-67);

print control means (24 in fig. 1) for printing based on interpretation of the print data processing means (col. 5, lines 16-18); and

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job processing state monitor means (25 in fig. 1), contained in the printer, for monitoring a processing state of the print job data based on the reply information returned from the print data processing means (col. 6, lines 3-5, 24-28).

Although Fujita does not teach the information of the predetermined destination is included in intrinsic data of the reply information, Fujita teach the printer know how to return the status of the print job to host computer (see 1905 in fig. 19) and it is not necessary to have information of destination in the reply information when only one host computer connected to a printer. If a plurality of devices communicates each other in the network, Fujiyama, in the same field of endeavor, teaches the information of the sending device or user is included in the request information (search condition 103 in fig. 10) in the packet (101 in fig. 10, col. 11, lines 1-6) and also reply information includes the determined destination (see 115 in fig. 11A and 11B, col. 11, lines 20-29).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the status inquiry command of Fujita including the information of the sending device or user as taught by Fujiyama. The suggestion for modifying the status inquiry command of Fujita can be reasoned by one of ordinary skill in the art as set forth by Fujiyama because 1) both of Fujita and Fujiyama are the same area of exchanging the communication data between a plurality of devices; 2) Fujiyama provides exchanging communication between a plurality of input devices and output devices in which information of each of input devices and output devices are clarified in each of request packets and reply information packets. Therefore, the resultant of the combination would allow the user at each computer in the system of Fujita or Fujiyama to keep track the status of the sending job.

Although Fujita teaches the host computer (from 10 in fig. 1) for generating print data and for issuing reply information (i.e., request command or status inquiry command in fig. 8) at a predetermined position of print job data containing the print data (col. 5, lines 5-9 and 61-63), Fujita does not mention print data generating means and reply information issuance means within the host for generating print data and issuing request status commands.

McCormick, in the same field of endeavor, teaches windows print manager (fig. 3) for generating print data and control printing (1601 in fig. 16) for issuing the request status commands (col. 8, lines 20-32).

It would have been obvious to have modified the system of Fujita for generating print data and status request command from specified units from the host computer as taught by McCormick. The suggestion for modifying the system of Fujita can be reasoned by one of ordinary skill in the art as set forth by McCormick because both of the printing systems of Fujita and McCormick are related with the exchange of data between the host computer and the printer and McCormick provides the host computer to generate print job including status request command and receive the status information from the printer to the user so that the user easily keep tracks any status of the printer.

As to claim 2, Fujita teaches the print job data processing means returns the reply information to the predetermined destination after completion of processing of the print data (col. 5, line 64 through col. 6, line 5).

As to claim 3, Fujita teaches if the reply information is related to print data concerning print operation, the print job data processing means checks execution of the print data concerning

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print operation before returning the reply information to the predetermined destination (col. 5, line 64 through col. 6, line 5).

As to claim 4, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein the print job data processing means returns timing specified on the timing specification information (col. 1, lines 48-50).

As to claim 5, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print data processing means returns the reply information to the predetermined destination after completion of processing the print data related to the reply information (col. 1, lines 48-50).

As to claim 6, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print data processing means returns the reply information to the predetermined destination after checking processing of the print data concerning print operation related to the reply information (col. 5, line 64 through col. 6, line 5).

As to claim 7, Fujita teaches the reply information issuance means issues the reply information and the timing specification information so that the print data is placed between the reply information and the timing specification information. (col. 5, line 64 through col. 6, line 5).

As to claim 8, Fujita teaches the reply information issuance means issues the timing specification information and the reply information so that the timing specification information,

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the print data, and the reply information are processed by the print data processing means in this order (col. 5, line 64 through col. 6, line 5).

As to claim 9, Fujita teaches the print data concerning print operation is at least any one of a paper feed instruction, a paper eject instruction, a page feed instruction, a line feed instruction, and a carriage return instruction (col. 5, 19-23; note: the printer command should include these above features).

As to claim 10, Fujita teaches reply information detection means for detecting the reply information returned from the print data processing means and sending the detected reply information to the job processing state monitor means (from 23 to 26 in fig. 1).

As to claim 20, McCormick teaches:

means (i.e., windows print manager) for generating print data and means (i.e., control printing 1601 in fig. 16) for issuing the request status commands (col. 8, lines 20-32).

a job processing state monitor function (1601 in fig. 16) of monitoring a processing state of the print job data based on the reply information returned from the printer in a format that can be read and understood by a computer (col. 8, lines 50-53).

However, McCormick does not teach reply information at a predetermined position of print job data containing the print data.

Fujita teaches reply information (i.e., request command or status inquiry command in fig. 8) at a predetermined position of print job data containing the print data (col. 5, lines 5-9 and 61-63).

It would have been obvious to have modified the system of McCormick for locating the reply information at a predetermined position of the print job containing the print data as taught

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by Fujita. The suggestion for modifying the system of McCormick can be reasoned by one of ordinary skill in the art as set forth by Fujita because Fujita provides the host computer to generate print job including status request command and receive the status information from the printer to the user so that the user easily keep tracks any status of the printer.

However, Fujita does not teach the information of the predetermined destination is included in intrinsic data of the reply information.

However, neither McCormick not Fujita teach the information of the predetermined destination is included in intrinsic data of the reply information.

Fujiyama, in the same field of endeavor, teaches the information of the sending device or user is included in the request information (search condition 103 in fig. 10) in the packet (101 in fig. 10, col. 11, lines 1-6) and also reply information includes the determined destination (see 115 in fig. 11A and 11B, col. 11, lines 20-29).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the status inquiry command of Fujita including the information of the sending device or user as taught by Fujiyama. The suggestion for modifying the status inquiry command of Fujita can be reasoned by one of ordinary skill in the art as set forth by Fujiyama because 1) both of the combination of McCormick, Fujita and Fujiyama are the same area of exchanging the communication data between a plurality of devices; 2) Fujiyama provides exchanging communication between a plurality of input devices and output devices in which information of each of input devices and output devices are clarified in each of request packets and reply information packets . Therefore, the resultant of the combination would allow the user

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at each computer in the system of McCormick, Fujita or Fujiyama to keep track the status of the sending job.

As to claim 21, McCormick teaches the reply information issuance function issues timing specification for specifying return timing of the reply information in addition to the reply information (col. 10, lines 36-46).

As to claims 22 and 30, McCormick teaches reply information detection (1603 in fig. 16) function of detecting the reply information returned from the printer and sending the detected reply information to the job processing state monitor function (1601 in fig. 16).

As to claim 23, due to the similarity of this claim to that of the feature of the combination of Fujita and Fujiyama, McCormick as in claim 1, this claim is rejected as the reasons applied to claim 1 except for a monitoring processor which is external to the printer, such limitation is merely a matter of design choice and would have been obvious in the system of Fujita if the monitor processor is set up in a server. Fujita teaches that a monitoring processor (23 in fig. 20) is associated with page monitor 60 (fig. 20) detects the status of each page and then notifies to the host via interface (21 in fig. 20). If a monitoring processor, which is external to the printer, receives the status information from the printer, the result is the same with the teaching of Fujita. Therefore, the monitoring processor being external to the printer in Fujita would have been a matter of obvious design choice to one of ordinary skill in the art.

As to claim 25, Fujita teaches the print data processing means automatically returns the reply information to the predetermined destination and the return of the reply information is not

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in response to any external command (the return of the reply information to the host based on the status inquiry command included in the print job, col. 6, lines 24-28).

As to claims 26-27, Fujiyama teaches the printer system in utilized in a network environment includes a plurality of host computers that output information to the printer. (see fig. 1).

Response to Arguments and Amendment

Applicant's arguments filed 7/16/02 have been fully considered but they are not persuasive.

Applicant asserted in page 2 “ Fujita, on the other hand, clearly discloses transmitting a separate and independent inquiry command from a host computer 10 to a printer 20.”. In reply, Applicant does not cite above statement in the reference of Fujita. In contrast, Fujita clearly teaches a print job comprising image data and command (col. 14, lines 47-49 and col. 13, lines 59-67) in which the command including page inquiry command (col. 14, lines 34-35).

Applicant asserted in page 2 “ Fujita does not teach or suggest locating intrinsic data within the reply information that indicates to which destination the job processing information should be sent.” And in page 3, Applicant respectfully submits that McCormick, like Fujita, fails to disclose, teach or suggest locating intrinsic data, within the reply information, that indicates to which destination (or computer) the job processing state information should be sent.” In reply, although either Fujita or McCormick does not teach the information of the predetermined destination is included in intrinsic data of the reply information, Fujita teach the printer know how to return the status of the print job to host computer (see 1905 in fig. 19) and it is not

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necessary to have information of destination in the reply information when only one host computer connected to a printer. If a plurality of devices communicates each other in the network, Fujiyama, in the same field of endeavor, teaches the information of the sending device or user is included in the request information (search condition 103 in fig. 10) in the packet (101 in fig. 10, col. 11, lines 1-6) and also reply information includes the determined destination (see 115 in fig. 11A and 11B, col. 11, lines 20-29).

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

Examiner's Remarks

Lung et al. (U.S. Patent No. 5,533,175) disclose The controller includes a dispatcher for keeping track of sequential print data received from the host computer and separating the print data into raw image data and print commands, a CPU which executes the print commands to instruct the printer to start or stop a printing job, report printer status to the host computer, manage printer configuration, etc.

Danknick (U.S. Patent No. 6,021,429) discloses Print data and printer status commands are fed to printer interface card 29 from NEB 2 via peripheral connector 27, and printer status information and statistics, e.g., number of pages printed, signals indicating end times of print jobs, etc.

Yamaguchi et al. (US 6,094,276) discloses the print job packet including the print data and status request information (see fig. 9).

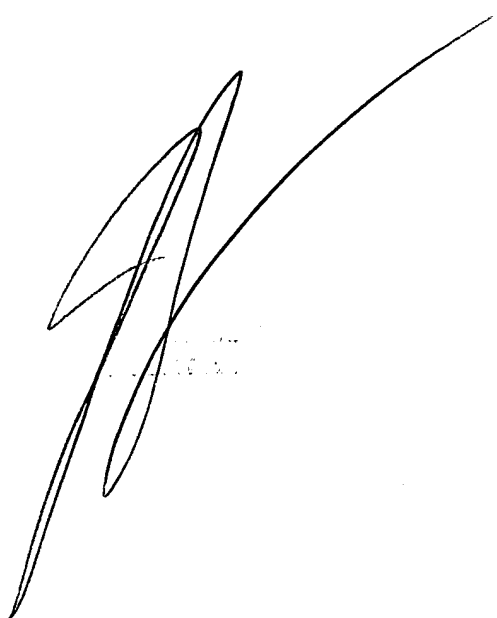
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Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Aug. 10, 2002

A handwritten signature in black ink, consisting of several overlapping loops and a long, sweeping horizontal stroke extending to the right.